

JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Park Management
Subactivity: Facility Operations and Maintenance

Program Components	2001 Enacted	Uncontr/ Related Changes	Program Changes (+/-)	2002 Budget Request	Change From 2001 (+/-)
A. Facility Operations	179,756	+4,149	-910	182,995	+3,239
B. Facility Maintenance	278,555	+4,150	+11,497	294,202	+15,647
Total Requirements \$(000)	458,311	+8,299	+10,587	477,197	+18,886

AUTHORIZATION

16 U.S.C. 1	The National Park Service Organic Act
16 U.S.C. 1a-8	The General Authorities Act
Public Law 98-540	Amendment to the Volunteers in the Park Act of 1969
33 U.S.C. 467-467	National Dam Inspection Program
42 U.S.C. 6900 et seq.	Resource Conservation and Recovery Act
42 U.S.C. 9600 et seq.	Comprehensive Environmental Response, Compensation and Liability Act
29 U.S.C. 794, section 504	Rehabilitation Act of 1973, as amended
42 U.S.C. 4151-4157	Architectural Barriers Act of 1968
Public Law 105-391	The National Parks Omnibus Management Act of 1998
47 U.S.C. 901 et seq.	National Telecommunications and Information Administration

OVERVIEW

The **Facility Operations and Maintenance** subactivity provides for the routine, daily work and for the periodic repairs and rehabilitation necessary (1) to perform the basic upkeep of park facilities and stewardship assets, (2) to ensure that facilities are in compliance with Federal, State, and local standards, and (3) to ensure that parks remain safe, clean, and open to visitors.

National park areas have been authorized by Congress to preserve and protect the cultural and natural resources that are America's great heritage. In order to preserve and protect the resources and ensure that the parks are safe and accessible for public use, the National Park Service conducts a professional program of preventive and rehabilitative maintenance of park resources, facilities, infrastructure and lands.

Based on the latest physical inventory data available, the National Park System contains approximately 7,580 administrative and public use buildings, 5,771 historic buildings, 4,389 housing units (includes approximately 1,000 historic housing units) 8,000 miles of roads, 763 miles of paved trails, 12,250 miles of unpaved trails, 1,861 bridges and tunnels, approximately 1,500 water and wastewater systems, 270 electrical generating systems, approximately 73,000 signs, 8,505 monuments, 250 radio systems, over 400 dams, more than 200 solid waste operations, and many other special features. These facilities must be maintained at an operational level that ensures continued protection, preservation, serviceability, and use and enjoyment by park visitors.

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APPLICABLE NATIONAL PARK SERVICE MISSION GOALS

- Ia Natural and cultural resources and associated values are protected, restored and maintained in good condition and managed within their broader ecosystem and cultural context.
- Ib The National Park Service contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.
- Ila Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities.
- Ilb Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.
- IIa Natural and cultural resources are conserved through formal partnership programs.
- IIb Through partnerships with State and local agencies and nonprofit organizations, a nationwide system of parks, open space, rivers, and trails provides educational, recreational, and conservation benefits for the American people.
- IIc Assisted through Federal funds and programs, the protection of recreational opportunities is achieved through formal mechanisms to ensure continued access for public recreation use.
- IVa The National Park Service uses current management practices, systems, and technologies to accomplish its mission.

Performance Goals

Long-term Goal IIa1	By September 30, 2005, 95% of park visitors are satisfied with appropriate park facilities, services and recreational opportunities.
Annual Goal IIa1	By September 30, 2002, maintain 95% of park visitors satisfied with appropriate park facilities, services and recreational opportunities.

Facility Operations and Maintenance Performance Information	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate
Percentage of visitors satisfied with National Park Service facilities, services and recreational opportunities	95%	95%	95%

A performance measure that is applicable to all program components of the Facility Operations and Maintenance subactivity is how National Park Service visitors rate the quality of resource and facility maintenance provided at National Park Service units. The goal is to maintain a 95 percent overall rating for visitor satisfaction with National Park Service facilities. A second performance measure that will gauge maintenance program success will be based upon the findings provided by Servicewide facility inventory and condition assessments currently under development. The change in the condition of National Park Service assets -- e.g., from "poor" to "good" -- will be a measure of the performance of the Facility Operations and Maintenance program, linking programmatic activities to defined results and outcomes. The National Park Service has developed a strategy that includes the establishment of a Servicewide facility inventory and condition assessment program.

A. Facility Operations FY 2001 Estimated Program and Anticipated Accomplishments

Enacted: \$179,756,000

Facility Operations is defined as those activities relating to the normal performance of the functions for which the facility or equipment is used. This includes the costs of utilities (electricity, water, sewage), fuel, janitorial services, window cleaning, rodent and pest control, upkeep of grounds, vehicle rentals, and waste management. These activities are considered operations and not maintenance. The personnel costs associated with the performance of

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these functions are generally included within the scope of Facility Operations, and the function of management of park facilities generally falls within the Facility Operations component.

National Park Service personnel maintain a diverse range of recreational, public use, historic and support facilities located throughout the Nation. Park areas range from small historic sites to large battlefields; from shorelines and lakes to immense natural areas; and from prehistoric ruins to awe-inspiring geologic features. All come with a myriad of facilities and features, many common to the Park Service and yet some unique to specific sites, which must be properly maintained to protect the Government investment. Program elements and functions that comprise this funding component are discussed below.

Buildings – Building operations include activating and deactivating seasonal buildings; routine cleaning and custodial work in campground facilities, visitor centers, and other public use and administrative facilities; solid waste collection and disposal; rodent control; cleaning; and costs associated with cooling, heating, lighting and telephones. The workforce for building operations primarily includes laborers, maintenance workers, architects, engineers, electricians, carpenters, painters, plumbers, preservation specialists, and other skilled trade and craft specialists.

Roads – Road operations include picking up roadside litter; trash collection; sweeping; mowing; clearing rock falls, slides and debris; and snow/ice control. At parks which experience significant snowfall, in some places in excess of 400 inches, critical roads operations would include snowplowing and ice control; installation and removal of snow poles; and opening roads in the spring. Workload can be extremely heavy at times due to unpredictable weather conditions such as snowfall, ice, heavy rain, and high winds. Complexity of tasks can be increased due to elevation, remote locations, distance from sources, and extreme terrain. Much of the equipment operated is specialized, requiring highly skilled employees, attention to safety, and a dependency on returning employees. The workforce primarily consists of heavy equipment operators, motor vehicle operators, and laborers.

Trails and Walks - Operational activities associated with trails and walks include opening and closing of trails in the spring and fall seasons, hazardous tree removal, supervising volunteer crews, and stock and packing operations. Physical labor is intensive and can be extreme due to elevation and exposed conditions, length and difficulty of the trail, stabilization requirements, and erosion control needs. There is a dependency on returning seasonal employees.



Boardwalk Trails at Cape Cod National Seashore

Grounds – Grounds operation activities are litter collection, trash removal, leaf collection and removal, mowing, edging and trimming, grounds irrigation, pest management, cleaning fire grates, cleaning statuary, and opening and closing campgrounds. The workforce consists primarily of gardeners, landscape architects, horticulturists, laborers, maintenance workers, and equipment operators.

Fleet Management – Basic operational fleet maintenance includes interior and exterior cleaning of vehicles and equipment, installation and removal of attachments, preparing new vehicles for service, and fueling. Depending on the age and condition of some equipment, work can be complex and may require re-tooling or onsite manufacturing

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of unavailable or obsolete parts. Electronic systems, diagnostic monitoring, and work on alternative fueled vehicles require more sophisticated equipment and expertise. Parks have automotive repair shops that provide the full range of service on heavy equipment, tractors and mowing equipment, boats and passenger vehicles critical to park needs in maintenance, resource protection, and visitor services. The workforce consists of maintenance workers and mechanics.

Utilities - Critical to any park operation are the utility systems such as water, wastewater, electrical, telephone and radio systems. Some of the most unique utility systems in the world are found at the national parks; examples include the water system at Grand Canyon National Park, the elevator and utility systems at the St. Louis Arch (Jefferson National Expansion Memorial), and the cave sewer pumping system at Carlsbad Caverns National Park. Besides those systems with unique characteristics, utility systems in the National Park Service range in age from the 1930s to modern times, and represent the full range of problems associated with an aging and deteriorating infrastructure. Workload and complexity are clearly affected by age and condition as well as season and climate. Basic utilities operations include activating and deactivating water systems; operating and testing water and wastewater systems; pumping sewage; servicing heating, ventilation and air conditioning equipment; paying rates for utilities produced by public companies; operating/servicing elevator and transport systems and inspecting and adjusting utility system components to maintain full service to park facilities. All parks have solid waste collection operations, whether performed in-house or under contract, and may manage garbage and trash collection in fragile environments. Many isolated parks generate their own electrical power, requiring extensive generation facilities and high levels of technical expertise. At some parks, particularly cave parks and the Jefferson National Expansion Memorial, elevators or transport systems are present and must be maintained. All parks have communication systems, which may include radio, dispatch, and telephone. The workforce consists of electricians, plumbers, plant operators, and other skilled trade specialists.

Dock and Water Facilities – Dock and water facility operations include servicing marine toilet facilities, operating marine fuel stations, operating transport craft, water transport of waste materials, and cleaning and servicing remote facilities from watercraft. In some cases, specialized skills and experience, such as scuba diving, underwater blasting, and ship handling are required.

Park Facility Management - Typical operations management tasks include recruitment and selection of employees, time and attendance reports, employee supervision and performance evaluation, materials purchase, contract inspection, and budget management. It also includes long range development and protection of facilities. Tasks include multi-year facilities management plans; budget formulation and development; planning, design and construction activities involving existing or new facilities; projections of future facility needs; and management of inventory and condition assessment programs for facilities. Facility management includes day-to-day management of facilities, including setting schedules; assigning tasks; allocating resources, including personnel, equipment, and materials; and inspecting work completed.

There are a number of systems, services, and policies that support and guide park managers so that routine operational activities are accomplished efficiently and effectively. Computerized facility management programs are utilized to systematically manage maintenance operations in all areas. Planning, organizing, directing, and controlling work activities are the fundamental principles of an effective maintenance management program.

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FY 2002 BUDGET REQUEST

	2002 Budget Request	Program Changes (+/-)
▪ Facility Operations \$(000)	182,995	-910
The FY 2002 request for Facility Maintenance is \$182.995 million, which represents a net increase of \$3.239 million over the FY 2001 enacted level. The FY 2002 proposed programmatic decrease of \$0.910 million to Facility Operations activities includes streamlining.		
Justification for this program change is included at the end of this subactivity's presentation.		

B. Facility Maintenance *FY 2001 Estimated Program and Anticipated Accomplishments*

Enacted: \$278,555,000

Facility Maintenance is the upkeep of facilities, structures, and equipment necessary to realize the originally anticipated useful life of a fixed asset. Maintenance includes preventive maintenance; normal repairs; replacement of parts and structural components; periodic inspection, adjustment, lubrication and cleaning (non-janitorial) of equipment; painting; resurfacing; and other actions to assure continuing service and to prevent breakdown. Maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, those originally intended. The lack of maintenance can reduce an asset's value by leading to equipment breakdown, premature failure, and shortening useful life. Program elements and functions that comprise this funding component are discussed below.

Buildings – Building maintenance includes painting; plumbing; roofing; a multitude of minor building and structural repairs; foundation work; general buildings maintenance; floor refinishing; hazardous materials removal and storage for disposal; equipment, appliance, and furnishings repair or replacement; and masonry work. The workforce for building maintenance includes laborers, maintenance workers, architects, engineers, electricians, carpenters, painters, plumbers, preservation specialists, and other skilled trade and craft specialists.

Roads – Roads maintenance includes brushing roadsides; cleaning ditches and culverts; grading roads; asphalt overlays; patching potholes; filling cracks; striping; sign repair and replacement; painting bridges; grading; and hauling and stockpiling material. Workload can be extremely heavy at times due to unpredictable weather conditions such as snowfall, ice, or heavy rain. Complexity of tasks can be increased due to elevation, remote locations, distance from sources, and extreme terrain. The repair of National Park Service roads is often complicated by peak visitation that coincides with short construction/maintenance seasons. Much of the equipment operated is specialized, requiring highly skilled employees, attention to safety, and a dependency on returning employees. The workforce primarily consists of heavy equipment operators, motor vehicle operators, and laborers. Examples include the roads at Lake Clark National Park in Alaska, Skyline Drive in Shenandoah National Park, and the tour road at Gettysburg National Military Park.

Trails and Walks - Trails and walks maintenance activities include drainage and tread repair; replacing and repairing signs and foot bridges; repairing and constructing boardwalk; repairing and constructing rock and log retaining walls; installing interpretive signage; and brushing trailsides. There is a dependency on returning seasonal employees.

Grounds - Grounds maintenance activities include servicing and repairing irrigation systems, painting, repairing outdoor fixtures and furnishings, repairing walls and fences, repairing and replacing light fixtures, and repairing and

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replacing boundary markers. Features of grounds assets are fences, walls, grave markers, statuary, fire grates, tables, litter containers, benches, flag poles, trees, shrubs, flower beds, and irrigation systems. The workforce for grounds care consists primarily of gardeners, landscape architects, horticulturists, laborers, maintenance workers, preservation specialists, and equipment operators.

Fleet Management - Maintenance activities performed on vehicles and equipment include routine oil changes and tune-ups, engine overhauls, tire repair, machinist work, body work, welding, painting, fabrication of parts, and maintaining a parts operation. The workforce consists of maintenance workers and mechanics.

Utilities – Utilities maintenance activities include all repair and replacement on water and wastewater equipment such as pumps, motors, grinders, valves, piping systems; repairing electrical distribution lines and devices; repairing and replacing heating, ventilation, and air-conditioning units; repair and replacement of special utility subsystems such as garbage dumpsters, solid waste transfer station components, electrical distribution system substations and equipment, and some radio system components. Some of the most unique utility systems in the world are found at the national parks; examples include such items as the water system at Grand Canyon National Park and the cave sewer pumping system at Carlsbad Caverns National Park. The workforce includes electricians, plumbers, and plant operators.

Dock and Water Facilities - Dock and water facilities maintenance includes repairing and replacing docks and ramps, painting dock facilities, repairing boats and marine equipment, maintaining fish cleaning facilities, and repairing and maintaining navigational aids and buoys. Specialized skills and experience, such as scuba diving, underwater blasting, and ship handling are sometimes required.

Park Facility Management - Facility operations management includes day-to-day management of facilities, including setting schedules; assigning tasks; allocating resources, including personnel, equipment, and materials; and inspecting work completed. Included in this function is overall division management, work planning and programming, identification of health and safety issues, and long range planning. Park support staff must deal with planning, comprehensive design, contract document preparation, estimating project proposal presentations, surveying, drafting, updating building files, contract administration, maintaining drawing files and a technical library. When appropriate, park staff and management are provided with technical guidance on park development, rehabilitation, and construction projects.



NPS Facility Maintenance

Facilities management includes long-range development and protection of facilities. Tasks include multi-year facilities management plans; budget formulation and development; planning, design and construction activities involving existing or new facilities; projections of future facility needs; and management of inventory and condition assessment programs for facilities. A number of programs, managed at the Servicewide or Regional Office level, fall under the Facility Maintenance component.

At the central office level, policy is established, and oversight and coordination is provided for programs that are carried out in field locations.

Among these are the Facility Management Software System, the Condition Assessment Program, the Dam Safety Program, the Hazardous Waste Management Program; funding to handle storm and flood emergencies; and a specialized Field Operations Technical Support Center which provides professional advice and technical direction specifically for facility management, and park operations and

maintenance activities. The regionally managed cyclic maintenance and repair and rehabilitation programs also address facility maintenance needs.

Facility Management Software System - The Facility Management Software System (FMSS) is a commercial product that is an asset maintenance software program designed to help organizations closely control and track maintenance expenses, develop maintenance backlog priority lists, improve safety, and more effectively deploy productive assets, personnel and other resources. FMSS, which was tested on a pilot basis at 30 parks during fiscal

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year 2000, offers great flexibility to meet the changing and expanding needs regarding reporting and analysis. The NPS requested and was provided \$2.0 million in FY 2001 for this project. With this funding in FY 2001, the NPS is proceeding beyond the pilot program and is beginning deploying the system at 120 park units. Deployment involves purchase of site licenses and software, installation, and user training. The system will serve as the primary source of data on which facility management decisions about allocation of financial and other resources are based. Throughout the implementation process, the system will be used to collect inventory and condition assessment data on assets necessary to the mission so that the most critical needs may be identified. The FMSS also will allow data integration with other NPS systems.

Condition Assessment Program - A key component to more effective management of facilities is a comprehensive inventory, needs assessment, condition assessment, and selection process, which provides the necessary Servicewide information for determining what resources and activities are necessary to maintain facilities and infrastructure in good operating condition. In FY 2001, \$1.0 million was requested and provided to establish an effective ongoing program to collect detailed, comprehensive inventory and condition assessment data on critical National Park System assets and to identify those in poor condition, as mandated by Department budget guidance and the Federal Accounting Standards Advisory Board (FASAB) reporting requirements. This funding will be used to conduct comprehensive condition assessments in selected parks. Annual condition assessment surveys will be necessary to enable the National Park Service to monitor the effectiveness in reducing maintenance backlogs. This will provide National Park Service managers a means of early detection of potential problems in line with preventing further facility deterioration and possible failure of facilities.

The intent of the National Park Service is to continue collecting detailed information on National Park Service assets. This facilities inventory condition assessment information will use objective criteria, such as industry standards (where applicable) and FASAB accounting requirements, to provide a baseline against which remediation progress can be measured. This in turn, will provide performance indicators upon which to base future management decisions and planning. This process will assist the Service in determining which facilities are necessary for the mission and which could be excised from the NPS inventory. This process acknowledges that, given limited fiscal resources, not every asset in the Park Service will receive the same level of attention, but will allow the NPS to identify the most critical assets for management. Further, the Service will monitor the percentages of facilities improved from failed or poor condition to good condition as the principal performance measures and indicators in determining the efficacy of National Park Service regional maintenance programs.

Dam Safety Program - The National Park Service is required to comply with Public Law 104-303, The National Dam Safety Program Act, that mandates the inventory, inspection, and corrective action of dams located within or adjacent to National Park System units. The programmatic goals of the National Park Service Dam Safety Program are: (1) to ensure that all dam structures are inventoried, (2) to inspect National Park Service dams to determine whether they meet maintenance, operational, and safety requirements, and (3) to ensure corrective action is promptly taken to protect life, property, natural resources, or project purposes.

The performance of this program is validated based upon available information compiled in a computerized inventory of dams affecting the National Park System. In FY 2001, approximately \$1.437 million was provided within the Construction appropriation for projects; \$396,000 has been provided for administration of the dam safety program. For FY 2002, a greater emphasis will be placed upon utilizing all funding sources that are available for the deactivation of deficient or non-essential dams affecting the National Park System. The National Park Service is recognized as a leader in dam removals for the purpose of safety and environmental restoration.

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Dam Safety Program Workload Factors	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate
Number of dams inventoried affecting the National Park System	471 National Park Service 261 Non- National Park Service	490 National Park Service 262 Non- National Park Service	509 National Park Service 263 Non- National Park Service
Number of formal dam safety inspection reports prepared	49	49	49
Number of dams corrected to date	181	185	189
Number of dams deactivated to date	156	164	172

Field Operations Technical Support Center - The Field Operations Technical Support Center, located in Denver, Colorado, provides professional advice and technical direction for facility management, park operations and maintenance activities related to roads, trails, signs, utility systems, hazardous waste litigation and wireless communication networks. Among the center's continuing projects are the following:

- (1) Provide engineering design and related technical or administrative support in the procurement process to National Park Service field areas that are in the midst of acquiring new digital narrowband radio technology.
- (2) Comply with a mandate from the National Telecommunications and Information Administration (NTIA) to update and justify each of the National Park Service radio frequency authorizations that were not reviewed and justified within the last five years (and all assignments in those same networks that were issued subsequent to that date). In the NPS there are now over 5000 radio frequency assignments on some 300 radio systems, most of them critical to public safety and park resource management, including fire suppression and search and rescue missions, in addition to park administration. This exercise involves both the National Park Service and the Department of the Interior radio community and takes several months annually to complete, resulting in an update of the NTIA master database file of Federal radio frequencies.

A total of \$313,000 has been earmarked for coordination and oversight of the **Wireless Technology** Program for FY 2001. Complete replacement of the entire National Park Service radio equipment inventory is required to change to a new mandated narrowband radio technology to comply with current regulations. A Servicewide assessment of equipment inventory and needs was conducted in 1998 to determine field requirements to meet the regulations.

In FY 2000, \$1.037 million was included in the Construction and Major Maintenance appropriation within the equipment replacement activity, for radio equipment purchase and installation in selected parks to convert critical public safety communication networks to the new technology. Future funding will be used for radio equipment purchases and installation in parks whose needs have been prioritized, where mission requirements have been identified by a Comprehensive Telecommunications Strategic Plan and where employee safety is being jeopardized by failing communications equipment.

The required completion date for Servicewide conversion is January 1, 2005, for most of the wireless communications networks of the National Park Service and January 1, 2007 is the date set for completion of the balance. The replacement cost is estimated at \$150 million, including United States Park Police, for the digital narrowband technology required. The Department of the Interior is conducting an evaluation of anticipated radio replacement needs.

- (3) Negotiate and award contracts to provide utility service (water, sewer, gas, electric, and steam) to numerous park locations throughout the National Park System.
- (4) Coordinate with the General Services Administration to include parks in de-regulation contracting for electric service.
- (5) Continue to negotiate and provide contract administration for photovoltaic electric services for National Park Service field areas.
- (6) Provide services to transfer ownership of utility systems to public utility companies.

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Hazardous Waste Management Program - The National Park Service is responsible for managing solid and hazardous materials/wastes, fuel storage tanks, and cleanup of contaminated sites during routine operations and other related activities that occur on National Park Service lands. The National Park Service is conducting environmental compliance audits including environmental management system, pollution prevention, and sustainability studies as mandated by Executive Orders and numerous Federal, State, and local environmental laws and regulations. The Hazardous Waste Management Program coordinates and funds auditing activities, and provides policy, guidance, technical, and regulatory oversight as well as assistance requested by the field for these activities. Goals of the program include, but are not limited to, the implementation of uniform policies and processes to facilitate the National Park Service mission; the reduction of liability associated with the management of hazardous material/wastes, fuel storage tanks and contaminated site cleanup; and the provision of systematic documented, periodic and objective reviews of NPS facilities under the NPS Environmental Audit and Environmental Management System Programs. The objectives in coordinating these activities are to protect and restore park resources, and to protect the health and safety of NPS employees as well as visitors. The National Park Service plans to have a baseline audit performed at all National Park Service sites by September 2002, in accordance with Department of the Interior policy. Subsequently, all sites will be audited every three to five years. The NPS will develop a Servicewide environmental management system as mandated by Executive Order 13148. The Hazardous Waste Management Program was provided with \$11.384 million to implement its FY 2001 objectives.

Under the Resource Conservation and Recovery Act (RCRA) subtitle C, as well as many analogous State laws, the National Park Service is required to provide “cradle-to-grave” management of hazardous wastes generated by National Park Service operations and to minimize waste generation. Subtitle D of the Act requires the National Park Service to properly manage and close solid waste landfills located on National Park Service lands, and to recycle materials where appropriate. Subtitle I requires the National Park Service to properly maintain fuel storage tanks which contain gasoline and/or other petroleum products and to cleanup all fuel releases.

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requires the National Park Service to investigate and cleanup sites contaminated by hazardous substances. Once specific thresholds are exceeded during an assessment of a contaminated site, CERCLA requires that the National Park Service place that site on a Federal docket maintained by the Environmental Protection Agency. The act also provides the National Park Service with the authority to require parties responsible for contamination of Service lands to bear the burden in cleaning up these sites to legal specifications; practices and procedures have been developed to implement this authority. In addition, in order to minimize liability under CERCLA, the National Park Service has established a Lands Pre-Acquisition Environmental Site Assessment Program to evaluate properties for hazardous substance contamination prior to their acquisition.

Executive Order 13101 requires the National Park Service to incorporate waste prevention and recycling in its daily operations as well as increase and expand markets for recovered materials through Federal procurement methods. In addition, the NPS fosters the acquisition and use of products and services that favor the environment whenever cost-effective. Executive Order 13148 requires the National Park Service to integrate environmental accountability into daily decision-making, planning activities and functions of the National Park Service. This means that strategies must be established to (1) support environmental leadership through policies and procedures, for example by requiring facilities to create a pollution prevention plan and to incorporate environmental management systems into all management of national park facilities, and (2) promote auditing programs and place an emphasis on pollution prevention, as well as reducing the use of toxic chemicals, hazardous substances, ozone depleting substances and all pollution at park facilities.

Scheduled maintenance is a critical component of the overall management of hazardous and solid waste operations. Scheduled maintenance activities that relate to the management of hazardous waste include analysis of the waste, waste storage, waste handling, waste transportation, waste disposal, and employee operation and safety training. Scheduled maintenance activities that relate to the management of fuels include fuel inventory reconciliation, tank leak detection monitoring, tank testing, tank corrosion protection monitoring, employee operations and safety training. Scheduled maintenance activities which relate to the management of landfills include waste sorting for recycling, groundwater monitoring at landfills, and employee operations and safety training, among others.

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Hazardous Waste Management Program Workload Factors	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate
Number of fuel storage tanks sites that been upgraded, replaced or removed	172	72	50
Number of contaminated sites that have been investigated and or cleaned up	86	110	100
Number of parks that have been audited	160	100	100
Number of findings of noncompliance through environmental auditing	4200	2500	2500
Number of actions taken to correct a finding of noncompliance	78	2100	3400

Emergencies, Storms/Floods and Structural Fires - During the course of a typical operating year, a number of parks sustain damage to resources due to natural causes, such as severe storms, floods, fires, hurricanes and earthquakes. Funds budgeted under this item are used to cover such contingencies so that park operating funds do not have to be diverted from ongoing and essential park programs.

In FY 2000, a total \$2.985 million was provided in this appropriation for this purpose. Parks receiving emergency funding in FY 2000 included: Padre Island National Seashore, \$106,000; Glacier National Park and Preserve, \$73,000; Katmai National Park and Preserve, \$16,000; and several parks in the Southeast Region, \$997,000.

The amount provided in FY 2001 for this program is \$2.978 million.

Five-Year Maintenance and Capital Improvement Plan - In response to Congressional and Administration interest in improving accountability in construction and maintenance program accounts, the National Park Service and other Department of the Interior bureaus operate using a Five-Year Maintenance and Capital Improvement Plan that prioritizes infrastructure improvement needs over a five-year period. This plan includes the Line Item Construction and the Repair and Rehabilitation programs. The development of this Five-Year Maintenance and Capital Improvement Plan has been an important step in the improvement of the Interior Department's infrastructure assets for the new millennium.

The improvement of infrastructure assets is a commitment of the new Administration. Over time, the extensive infrastructure of the National Park System has deteriorated, as visitation has increased dramatically. In addition, the establishment of new park units has stretched available maintenance funding over a larger infrastructure base.

Repair and rehabilitation projects comprise a portion of the estimated \$4.9 billion deferred maintenance backlog, along with line item construction projects and road projects funded through the Transportation Equity Act for the 21st Century. This budget proposes nearly \$440 million in various project accounts to address the \$2.2 billion non-road portion of the estimated backlog.

The five-year plan has several important objectives. It will help us better understand the Interior Department's accumulated deferred maintenance needs and to comply with the Federal Accounting Standards Advisory Board (FASAB) document Number 6 on deferred maintenance reporting. It will aid departmental planning for future capital improvements.

Using a set of common definitions for facilities management terms in this Interior-wide planning process, the Interior Department will be able to present a more consistent and credible view of its budgeted resources and capital investments, goals, needs and priorities to the Administration and Congress. Details of specific projects are presented for FY 2001 and FY 2002 of the five-year plan for construction (Line Item) in the construction appropriation section of this document. Details of the FY 2002 maintenance (Repair and Rehabilitation) projects, as

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well as summary information presented for outyears for both maintenance and construction, are presented in a companion document. This Department is committed to reducing its accumulated deferred maintenance on existing facilities before constructing new facilities. When developing the FY 2002 budget and the Five-Year Maintenance and Capital Improvement Plan, the National Park Service prioritized projects with highest emphasis on critical deferred maintenance needs in health and safety, resource protection, and bureau mission.

Repair and Rehabilitation - Repair and rehabilitation projects are large-scale repair needs that occur on a less frequent or nonrecurring basis. They are projects that are designed to restore or extend the life of a facility or a component. Typical projects may include campground and trail rehabilitation, roadway overlay and/or reconditioning, bridge repair, wastewater and water line replacement, and the rewiring of buildings. These projects are usually the result of having deferred regularly scheduled maintenance to the point where scheduled maintenance is no longer sufficient to improve the condition of the facility or infrastructure. Deficiencies may or may not have immediate observable physical consequences, but when allowed to accumulate uncorrected, the deficiencies inevitably lead to deterioration of performance, loss of asset value, or both. Appropriations received in FY 2000 allowed the National Park Service to address high priority health and safety deferred maintenance projects such as the following: replacing unsafe exterior fire escapes at Fort Mason/Golden Gate National Recreation Area; replacing seriously corroded water lines to Sunset Campground at Death Valley National Park; eliminating hazardous trees/limbs parkwide at Lincoln Home National Historic Site; removal of five hazardous structures at Delaware Water Gap National Recreation Area; and replacing decayed/unsafe boardwalk structure to meet safety codes at Sea Camps at Cumberland Island National Seashore.

Like Cyclic Maintenance, this program is coordinated by Regional Offices, where projects are evaluated and prioritized from needs lists developed by the individual parks. This insures program consistency and equitable distribution of funds. The repair and rehabilitation program base funding level is \$55.459 million for FY 2001. Projects planned for completion include the rehabilitation of unsafe propane systems at Glacier National Park; removing abandon and deteriorating bridge at Vicksburg National Military Park; removing friable asbestos from buildings at Grand Teton National Park; and repairing unsafe gravel roads at Great Smoky Mountains National Park. These projects address critical health and safety issues and are examples of deficiencies that the National Park Service intends to rectify.

The NPS also received \$11.974 million in additional funding from Title VIII for repair and rehabilitation work. These funds are contained in the construction appropriation and will enable the National Park Service in FY 2002 to continue to address high priority deferred line item projects that address critical health and safety, water and wastewater, structural fire, and energy efficiency related issues.

Cyclic Maintenance - The Cyclic Maintenance Program incorporates a number of regularly scheduled preventive maintenance procedures and preservation techniques into a comprehensive program that prolongs the life of a particular resource, utility, or facility. Cyclic maintenance funding is most optimally applied to facilities in "fair" condition, as opposed to those needing more corrective repair provided under the repair and rehabilitation program. Such non-routine but recurring maintenance needs can be met most efficiently through centralized coordination and consolidation at the Regional Office level. This consolidation represents the most practical and balanced approach to identifying, evaluating, prioritizing, and selecting projects to comply with national program criteria and the level of funding available each fiscal year.

An important element of the cyclic maintenance program is providing for cyclic repair of cultural resources. The Cultural Cyclic Maintenance Program involves the renovation, restoration, preservation and stabilization of prehistoric and historic sites, structures, and objects. The type of work performed may include ruins stabilization, installation and replacement of climate/environmental systems, maintenance and replacement of historic landscape plantings, fences, earthworks, walks, steps, irrigation systems, and roads. Funding for cultural cyclic maintenance is contained within the Resource Stewardship subactivity.

The cyclic maintenance program funding level is \$24.125 million for FY 2001. An additional increase of \$4.989 million was provided from the Title VIII appropriations and is shown in the construction appropriation. Projects funded under the cyclic maintenance program are selected from listings accumulated at the park level and submitted to the

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Regional Offices, where coordinators determine the relative merit of each project and establish a priority list for funding. Typical projects include road sealing, painting and roofing of buildings, trail brushing, sign repair and replacement, landscaping, repair of dock and marina facilities, and upgrades of electrical and security systems. Projects undertaken in this program are performed as often as once every two years or as infrequently as once every ten years. Cyclic maintenance projects for FY 2001 include: cutting hazardous trees and slopes along Skyline Drive at Shenandoah National Park; repainting wrought iron fence at the Old Courthouse at Jefferson National Expansion Memorial; replacing picnic tables at Antietam National Battlefield; crack sealing and asphalt overlay at Badlands National Park; and cyclic maintenance of marine lake facilities at Bighorn Canyon National Recreation Area.

Cyclic Maintenance and Repair/Rehabilitation Program (\$000)

Program	FY 1998 Enacted	FY 1999 Enacted	FY 2000 Enacted	FY 2001 Enacted	FY 2002 Request
Cyclic Maintenance	23,803	23,461	24,178	24,119	24,119
[Including FY 2001 Title VIII funding]				[29,108]	
Repair and Rehabilitation Program	32,581	53,081	55,581	55,459	75,349
[Including FY 2001 Title VIII funding]				[67,433]	

FY 2002 BUDGET REQUEST

	2002 Budget Request	Program Changes (+/-)
▪ Facility Maintenance \$(000)	294,202	+11,497
The FY 2002 request for Facility Maintenance is \$294,202 million, which represents an increase of \$15.647 million from the FY 2001 enacted level. The FY 2002 proposed programmatic increase of \$11.497 million to Facility Maintenance activities includes:		
	\$(000)	
▪ Streamlining	-910	
▪ Minuteman Missile National Historic Site One-time Costs	-4,989	
▪ Maintenance Management/Condition Assessment Transfer	-2,994	
▪ Repair and Rehabilitation Program	15,703	
▪ Facility Management Software System Upgrades	1,531	
▪ Facility Condition Assessments	2,656	
▪ Project Management Information System (PMIS) Support	500	
Total	11,497	
Justifications for these program changes are included at the end of this subactivity's presentation.		

JUSTIFICATION OF FY 2002 BUDGET REQUEST FOR FACILITY OPERATIONS AND MAINTENANCE

	2002 Budget Request	Program Changes (+/-)
Facility Operations and Maintenance \$(000)	477,197	+10,587

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The FY 2002 request for Facility Operations and Maintenance is \$477.197 million and 4,888 FTE, which represents an increase of \$18.886 million and a decrease of 105 FTE from the FY 2001 enacted level. The programmatic increase of \$10.587 million for the Facility Operations and Maintenance subactivity is justified by the proposed changes that follow:

- ***Streamlining (-\$1,820,000; -109 FTE)***: The NPS proposes to effect savings of \$2.549 million and 109 FTE in this program by reducing travel and other administrative overhead cost; procurement efficiencies; and making use of technological advances (such as, but not limited to, teleconferencing). Redundant administrative positions will not be filled when vacancies arise. The NPS expects to create more efficient systems and processes without affecting program delivery.
- ***Minuteman Missile National Historic Site Army (-\$4,989,000)***: The NPS is proposing a decrease of \$4.989 million in FY 2002 in funds that were transferred to the NPS from the Department of Defense in FY 2001 for one-time costs related to the maintenance, protection, or preservation of the land and interests in land described in section 3 of the Minuteman Missile National Historic Site Establishment Act of 1999.
- ***Maintenance Management/Condition Assessment Transfer (-\$2,994,000)***: The NPS is proposing to transfer base funding for the maintenance management and condition assessment management programs and to fund these activities in the future from within the repair and rehabilitation program.
- ***Repair and Rehabilitation Program (+\$15,703,000)***: Within the Operation of the National Park System appropriation, the NPS is proposing an increase of \$15.703 million in FY 2002 for the Regional Repair and Rehabilitation Program. This increase is comprised of \$12.709 million for additional repair and rehabilitation projects and \$2.994 million to accommodate the transfer of base funding for the facility condition assessment and Facility Management Software System to the Repair and Rehabilitation Program.

This increase would provide additional funding to be used toward reducing the backlog of park facility repair/rehab projects with the ultimate goal of eliminating the backlog. Projects funded with this increase would result in improved visitor experience through upgrade and repair of visitor facilities, e.g., roads, water and wastewater systems, and utilities. The funding will focus on increased maintenance of park facilities, and address the highest priority health and safety, resource protection, and handicap accessibility needs for parks.

The infrastructure at parks is old and deteriorated and many facilities require major rehabilitation to correct deterioration, health and safety concerns, and new code requirements. The backlog is extensive for modifications required for accessibility to meet the new Americans with Disabilities Act. The Occupational Safety and Health Administration (OSHA) requirements and onsite inspections require mandated improvements to shop facilities for employee safety. Rehabilitation of park housing is required to correct deficiencies and bring housing up to NPS-76 standards. Park housing constructed or painted before 1970 is likely to contain lead paint. This represents a significant proportion of NPS housing. Exposure to lead-based paint has been linked to neurological damage and impaired brain function, especially in young children, who are susceptible to ingestion of peeling paint. In addition, new regulations for accessibility clean drinking water, lead paint removal, stopping “point source” pollution, and wastewater treatment will require extensive improvements and rehabilitation of existing facilities. Funds are needed to restore damaged, deteriorated, or malfunctioning park facilities to safe and acceptable operating levels. Major overlaying and reconditioning of park roads, replacing sewer and water systems, repairing interpretive media, and replacing fire suppression systems are examples of work performed. This program will also be utilized to fund rehabilitation of visitor use facilities to meet the standards for existing handicap accessibility codes for the disabled. The total proposed Repair and Rehabilitation Program for FY 2002 is \$75.349 million, including \$7.181 million for the Facility Management Software System and Condition Assessment programs. This is an increase of \$19.890 million over the FY 2001 Repair and Rehabilitation Program (\$55.459 million), or an increase of \$7.916 million over the FY 2001 program including funds provided through the Federal Infrastructure Improvement program appropriation (\$67.433 million).

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▪ ***Facility Management Software System (+\$1,531,000)***: The NPS is proposing an increase of \$1.531 million in FY 2002 for maintenance management software upgrades. Funding is required to continue on schedule with the upgrade/replacement of the two existing Servicewide maintenance management information systems (MMS and Inventory and Conditional Assessment Program, ICAP). Public Law 98-540 requires an NPS facility maintenance management system for managing Servicewide maintenance programs, utilizing software to plan, organize, direct and control work activities. The Facility Management Software System (FMSS), which controls and tracks maintenance expenses, enhances the development of maintenance backlog priority lists, improves safety, and ensures the productive use of assets, was tested at 30 pilot parks in FY 2000 and is being deployed at an additional 90 park units in FY 2001. With this funding, the NPS will complete deployment in the remaining parks in the System during FY 2002.

▪ ***Facility Condition Assessments (+\$2,656,000)***: The NPS is proposing an increase of \$2.656 million in FY 2002 for the Servicewide facility inventory and condition assessment. This funding will be used to continue the first round of comprehensive condition assessments in the pilot parks that have tested the new facility management software. As a result, information which will be collected and updated on an ongoing basis (at least every five years), will provide the Service with the basis for tangible performance measures linking expenditures with a defined outcome or result, as defined in performance based budgeting under the Government Performance and Results Act (GPRA). These inventory and condition assessments will be the primary GPRA performance measure for the Service's maintenance related activities in future years. Also, such periodic, scheduled condition assessments are critical for the Service in making the most effective use of available fiscal and staff resources, and in monitoring and accounting for the use of available resources towards reportable results, as required in the Department's annual Chief Financial Officer's (CFO) Report.

▪ ***Project Management Information System (PMIS) Support (+\$500,000; +4 FTE)***: The NPS is proposing an increase of \$0.5 million and four FTE in FY 2002 for Project Management Information System upgrades and maintenance. The PMIS system is used to justify, prioritize and approve requests for one-time project needs. Funding would be used to create training modules, direct interfaces and systems integration, coordinate beta testing of new features or modules of the system, and to provide day-to-day system maintenance. This will facilitate support of field personnel in entering and prioritizing project needs and improve communication between all levels of users. The result will be better accountability and a more accurate picture of project needs.